

IN THE SPECIFICATION

Please amend the specification as follows:

Please amend the paragraph beginning at page 1, line 23 as follows:

Figs. ~~3 and 4~~ 3A and 3B are portions of a flowchart illustrating a process for searching for a base station using an adaptable length search window in accordance with an embodiment of the present invention; and

Please amend the paragraph beginning at page 1, line 26 as follows:

Figs. ~~5 and 6~~ 4A and 4B are portions of a flowchart illustrating a process for searching for a base station using an adaptable length search window in accordance with another embodiment of the present invention.

Please amend the paragraph beginning at page 7, line 1 as follows:

Figs. ~~3 and 4~~ 3A and 3B are portions of a flowchart illustrating a process 34 for searching for a base station using an adaptable length search window in accordance with an embodiment of the present invention. The process 34 (as well as the other processes described below) may be practiced within, for example, the mobile communicator 10 of Fig. 1 as well as in communicators having other architectures. The process 34 may be performed for each base station being searched by a particular communicator. In general, the process 34 uses a small search window size (SMALL) during normal operation. The small search window size is preferably selected to encompass most of the delay spread scenarios that are possible between the base station and the mobile (i.e., not worst case scenarios). Occasionally, a search is performed using a full search window size (FULL). As described above, this full search window size may be selected based upon a worst case delay spread that is expected in the channel between the base station and the mobile. The result of the full window search is used to determine whether significant energy exists outside of the small search window size for the base station. If significant energy does exist outside the small search window size, subsequent searching is performed at the larger search window size. If significant energy does not exist

outside of the small search window size, subsequent searching is performed at the small search window size. In one approach, significant energy is considered to exist outside the small search window size when one or more paths of a multipath channel are detected outside the small search window that have magnitudes exceeding a predetermined threshold level. In another approach, significant energy is considered to exist outside the small search window size when the sum of the energies of all the detected paths outside the small search window exceeds a predetermined threshold level.

Please amend the paragraph beginning at page 7, line 25 as follows:

Referring now to Fig. [[3]] 3A, the search window size (WINDOW) that will be used to search for the base station is set to SMALL (block 36). A time counter is then initialized to zero or some other reference value (block 38). A search is next performed for the base station using the current search window size (block 40). The search is then repeated until the time counter has reached a predetermined value T (block 42). It should be appreciated that the value of T may be modified over time based on one or more variables (e.g., mobile speed, etc.). With reference to Fig. [[4]] 3B, it is next determined whether the current search window size is equal to FULL (block 44). Because the search window size is not equal to FULL at this point in the process, the search window size is changed to FULL (block 46) and a full window search is performed (block 48). It is next determined whether any significant receive energy has been detected for the base station outside of the small search window during the full window search (block 50). If no such energy has been detected, the search window size is changed back to SMALL (block 52). If energy has been detected outside of the small search window, the search window remains at FULL (block 54). The process 34 is then repeated using the updated search window size (i.e., either SMALL or FULL). The time counter is again initialized (block 38) and searches are performed using the updated search window size until the time counter has again reached T (blocks 40 and 42).

Please amend the paragraph beginning at page 8, line 23 as follows:

Instead of checking the status of the current search window in block 44, a full window search (e.g., blocks 46 and 48) may be performed for each cycle of the process 34, regardless of

current search window size. As described above, in the illustrated embodiment, the decision to change to the small search window size is made based upon the single full window search of block 48. In an alternative approach, the decision to change to the small search window size is made only after N consecutive full window searches do not find significant energy outside the small search window. In this manner, the chances of changing to the small search window size based on a temporary reduction in detected energy caused by momentary fading, is reduced. In one embodiment of the invention, the method 34 of Figs. ~~3 and 4~~ 3A and 3B is modified by starting the process at block 46 (initializing the search window to FULL) and by ignoring the search window initialization of block 36. Thus, the search receiver will first check the full search window for energy outside the small search window and then change to the small search window if no significant energy is detected.

Please amend the paragraph beginning at page 9, line 7 as follows:

Figs. ~~5 and 6~~ 4A and 4B are portions of a flowchart illustrating a process 80 for searching for a base station using an adaptable length search window in accordance with another embodiment of the present invention. With reference to Fig. ~~[[5]]~~ 4A, the search window size is set to FULL (block 84) and a full window search is performed for the base station (block 86). A new search window size is next determined based on the results of the full window search (block 88). This determination can be made in any of a variety of ways. In one approach, for example, a delay spread of the channel is estimated using the results of the full window search. A smallest search window size may then be found that will encompass all significant energy within the estimated delay spread. The smallest search window size may be selected, for example, from a plurality of predefined search window sizes. Alternatively, the smallest search window size may be directly calculated by the earliest and latest usable detected paths. As will be appreciated, other techniques for determining a new search window size may also be used. As before, the decision to change to a new search window size may alternatively be based upon a plurality of consecutive full window searches. Also, the initial search window size of block 84 may be given a variety of sizes, based on speed, time, in a cyclic fashion, based on the results of previous searches, or a combination thereof. After the new search window size has been determined, the search window is set accordingly (block 90) and a time counter is initialized (block 92). With

reference to Fig. [[6]] 4B, searches are then performed until the time counter has reached a value of T (blocks 94 and 96). The process 80 is then repeated. As before, the value of T may change over time based on, for example, one or more variables.